Activities research news

Evidence-based activities that are proven to work!

By Lorena Tonarelli, M.Sc. *Current Activities* Research Reporter



Painting and handcrafts activity program improves cognition, depression and anxiety

A group of patients with dementia who participated in a short program offering weekly cognitivestimulation activities had improved cognition, depression and anxiety, a study found.

Patients were 77 community-dwelling older adults over 60 with moderate-to-severe dementia.

They attended a total of six sessions, each one consisting of various mentally-stimulating activities delivered by a nurse. The activities included conversation, reading, painting, handcrafts and exercise.

Activity choice explained

Painting and handcrafts activities were chosen because, besides being cognitive stimulating like conversation and reading, "they give the person with dementia the opportunity to create tangible objects," says the lead researcher, Dr. Gülzanaz Karatay, of Kafkas University, Turkey.

This enables them to feel they have accomplished something to be proud of, which helps them feel still important.

Note how exercise is, also, considered a cognitivestimulating activity.

This is because it has been shown, in studies, to increase blood flow to the brain. More blood means brain cells receive extra oxygen and nutrients, which, in turn, improves cognitive performance.

Improved cognition

One week after the last activity session, Karatay and colleagues found significant improvements in the participants' cognition, as demonstrated by a nearly three-point increase (from 17.98 to 20.62) in their Mini-Mental State Examination (MMSE) score.

(The MMSE scale measures the level of cognition of a person. Scores range from 1 to 30. The lower the score, the higher the cognitive impairment.)



Researchers found "significant improvements" in cognition

Potential treatment

The finding, published in the January 2011 issue of the Western Journal of Nursing Research, is of particular significance, given that in Alzheimer's disease the average annual decrease in MMSE score is 2 to 4 points.

And the study adds to the increasing evidence that mentally-stimulating activity programs could help delay or prevent cognitive loss.

Practice and variety

Karatay says the positive cognitive effects of such programs are likely due to the fact that they provide ongoing opportunities for practicing mental skills that, as the saying "use it or lose it" suggests, would otherwise be lost.

However, to ensure effectiveness, it is crucial to stimulate all brain areas.

This is achieved by making certain, as in Karatay's program, that participants engage in different types of activities.

Reduced anxiety and depression

Another important finding of the study is that attendance to the program significantly reduced anxiety and depression, two common symptoms of dementia.

Anxiety decreased from 19.74, before the program began, to 14.63, one week after the last session, as measured with the Becks Anxiety Inventory (BAI). (This has a maximum score of 66. The higher the score, the greater the anxiety.)

Depression dropped from 17.61 to 12.63, as measured with the Geriatric Depression Scale (GDS), a 15-item scale where higher scores indicate higher levels of depression.

The activity session

Here is the description of a typical session of Karatay's program for you to try.

- First, make sure you have all you need:
 - a newspaper or book, and
 - supplies for painting (e.g., paintbrushes, watercolors, paper, pencils, etc.) or handcrafts (e.g., wool, silk flowers, clay, model construction kits, etc.).

Remember, the activities are one to one. The sessions are delivered once a week and last 40 minutes.

What to do

Each session starts with 5 minutes of conversation, followed by:

- 5 minutes of reading from the chosen newspaper or book,
- 15 minutes of painting or handcrafts activities, and
- 15 minutes of exercise, either gentle stretching of arms and legs or walking.

Note: Conversation topics, books and newspapers should be ones of interest to the elder.

This ensures the activities are person centered, which is crucial to their effectiveness.

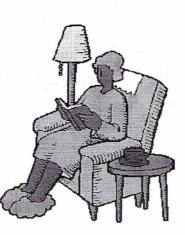
For the same reason, painting, handcrafts and exercise activities must be selected based on what the elder likes and can do.

Precautions

Since the elders participating in the activities are cognitively impaired, you need to take a few small, but very important, precautions.

Painting and handcrafts supplies must be safe for them to use, like scissors with rounded tips, and non-toxic glue, colors and clay.

You should also avoid too small items, such as beads, pins, needles and buttons, for dementia patients often attempt to eat them, putting themselves at risk of choking. The program starts with the elder reading a favorite book or newspaper



Tips

- Play gentle music softly in the background. The music should be chosen by the elders themselves, Karatay says, so as to "give them listening pleasure and lift their moods and spirits."
- Find volunteers to help with the activities. Karatays' team invited final-year students from a local college. You may also want to consider church groups, and the elder's family and friends.
- Add to the variety of the activities by offering different handcrafts projects every week.
 Karatay says: In the study, these "consisted of activities such as seniors creating a mask, a flower, an apple, a pear, or a cherry out of craft paper, or painting or decorating a dried branch. Importantly, the activities involved objects they were familiar with."

Adaptation for severe dementia

Elders in the more advanced disease stages will likely need a lot of help in order to successfully participate in the program. Here are a few things for you to consider about each of the activities:

- Conversation. The ability to talk is generally lost, at this stage, so you'll need to do much of the talking. Talk with the elder, even if they seem unresponsive. Always look them in the eyes, and smile.
- Book/newspaper reading. Reading is usually possible until late in the dementia. However, it is always a good idea to use large-font print material, to make things easier.
- **Painting/handcrafts**. Some elders may not be able to start the activities. You can help by gently placing your hand over their hand.... and slowly guiding them through the task.
- Exercise. Although the ability to understand instructions (e.g., "Stretch your arm above your head") is generally lost, exercising is still possible. Have the elder sit somewhere comfortable, and gently move their arms, legs and feet for them.